

**REMARKS**

**Summary of the Office Action**

Claims 1-7, 11-15 and 18-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kato et al. (U.S. Patent Application Publication No. 2002/0114249) (hereinafter “Kato”).

Claims 8-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kato in view of Kato et al. (U.S. Patent No. 6,058,093) (hereinafter “Kato 093”).

Claims 16-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kato in view of Watabe et al. (U.S. Patent No. 6,987,714) (hereinafter “Watabe”).

**Summary of the Response to the Office Action**

Applicants have amended each of independent claims 1, 6 and 18-21 to differently describe embodiments of the disclosure of the instant application. Also, claim 17 is amended to improve it's form. Accordingly, claims 1-21 remain currently pending for consideration.

**Rejections under 35 U.S.C. §§ 102(e) and 103(a) and Statement of Examiner**

**Interview Conducted on March 18, 2009**

Claims 1-7, 11-15 and 18-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kato. Claims 8-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kato in view of Kato 093. Claims 16-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kato in view of Watabe.

U.S. Patent and Trademark Office Examiner Aneeta Patankar and her supervisor Examiner Jorge Ortiz are thanked for the courtesies extended to Applicants' undersigned representative in a telephone interview conducted on March 18, 2009.

During the initial scheduling of this telephone interview, Examiner Patankar requested Applicants' undersigned representative to send her by facsimile an agenda summarizing the points to be discussed during the interview. Accordingly, Applicants' undersigned representative forwarded a Detailed Agenda to the Examiner on March 16, 2009 (resent to the Examiner on March 17, 2009 because of a possible facsimile transmission issue). The substance of the Examiner interview as conducted on March 18, 2009 and also the substance of the Detailed Agenda sent by facsimile to the Examiner will be discussed in the following remarks:

Each of the independent claims 1, 6, and 18-21 of this application are rejected under 35 U.S.C. § 102(b) based on Kato. Applicants respectfully submit that they are intimately familiar with Kato because it is assigned to the same company as the instant application and a number of the Inventors overlap on both applications. After careful study, Applicants note that the instant application's claims differ substantially from the disclosure of Kato for at least the following reasons.

As a general overview, Applicants note that Kato discloses a pre-pit detecting apparatus for an optical recording medium that involves setting (optimizing) a threshold value (slice level) from a push-pull signal to generate a digital signal in order to accurately detect pre-pits on a recording medium. However, the instant application discloses an invention that involves a method for improving a recording process by minimizing an offset value (an optical beam should be focused on the center of a track, for example). Applicants respectfully submit that features of

the invention of the instant application, as described in the independent claims, are completely different from the disclosure of Kato as will now be particularly discussed.

Previously-Submitted Arguments in This Regard

In the Response previously-filed by Applicants on August 25, 2008, Applicants explained that independent claim 1 of the instant application goes on to describe an advantageous combination of features that includes the “first generation device (at least a part of the pre-pit is formed within a radiation range of the light beam)” and the “second generation device (the pre-pit is formed outside the radiation range of the light beam)” are not disclosed in Kato.

Applicants explained that Kato does not distinguish the “first generation device” and the “second generation device” in the specific manner described in independent claim 1 of the instant application. Similar assertions were also made for the remaining independent claims of the instant application in these regards.

Final Office Action dated December 19, 2008

The Final Office Action dated December 19, 2008 maintained the previous rejections in these regards, but did not specifically address Applicants’ main arguments summarized above. As a result, these arguments will be explained in further detail in the following sections.

Examples of Technical Differences between Kato and the Claims of The Instant Application

(1) First, one technical feature described in independent claim 1 of the instant application is that a signal is generated based on a reflected light from the recording medium “when the pre-pit is formed outside the radiation range of the light beam.” Applicants note that this feature

corresponds, for example, to “T1” and “T3” as shown in Figs. 3A to 3C of the instant application. In other words, “T1” and “T3” are formed outside the radiation range S1 of the light beam in Figs. 3A to 3C.

The Final Office Action asserts that this feature is disclosed at Figs. 13A and B and paragraphs 70-71 of Kato. However, Applicants note that “T1” and “T3” in the instant application are marks recorded by a light beam radiation. In other words, “T1” and “T3” of the instant application are not pre-pit detection signals and do not generate pre-pit detection signals. On the other hand, Fig. 13A of Kato, as applied by the Final Office Action, indicates a pre-pit detection signal on a “non-recorded area” and Fig. 13B of Kato, as applied by the Final Office Action, indicates a pre-pit detection signal on a “recorded area.” As a result, it is clear to Applicants that “T1” and “T3” of Figs. 3A to 3C of the instant application do not correspond to the disclosure at Figs. 13 A and B and paragraphs 70-71 of Kato, as applied by the Final Office Action.

(2) Second, another technical feature described in independent claim 1 of the instant application is that a signal is generated based on a reflected light from the recording medium “when at least a part of the pre-pit is formed within a radiation range of the light beam onto the groove track.” Applicants note that this feature corresponds, for example, to “T2” as shown in Figs. 3A to 3C of the instant application. In other words, “T2” is formed within the radiation range S1 of the light beam in Figs. 3A to 3C.

The Final Office Action asserts that this feature is disclosed at Fig. 6 and paragraphs 40-41 of Kato. However, Applicants note that “T2” in the instant application is a mark recorded by a light beam radiation. In other words, “T2” of the instant application does not generate any of a

tracking error signal, a focus error signal, a slider driving signal, or a pre-pit detection signal. On the other hand, Fig. 6 and paragraphs 40-41 of Kato, as applied by the Final Office Action, indicate a tracking error signal, a focus error signal, and a pre-pit detection signal. As a result, it is clear to Applicants that “T2” of Figs. 3A to 3C of the instant application does not correspond to the disclosure at Fig. 6 and paragraphs 40-41 of Kato, as applied by the Final Office Action.

Similar arguments also apply to the remaining independent claims of the instant application.

In light of these clear differences between each of the independent claims of the instant application and the applied Kato reference, the anticipatory rejections under 35 U.S.C. § 102(b) should be withdrawn. For similar reasons, the rejections of dependent claims under 35 U.S.C. § 103(a) should also be withdrawn and also because the additionally applied references under 35 U.S.C. § 103(a) do not cure the deficiencies discussed above with regard to Kato.

In response to these technical arguments, in the Examiner interview conducted on March 18, 2009, the Examiners indicated an understanding of the advantageous features of each of the independent claims in which the calculation device or calculation step calculates an offset value based on the first regenerative signal and the second regenerative signal. However, the Examiners were concerned that each of the independent claims of the instant application as currently worded could be interpreted broadly to not require that the calculation device or calculation step calculates the offset value using both the first regenerative signal and the second regenerative signal. In particular, the Examiners indicated that the independent claims could be broadly interpreted to read on a “standard” offset arrangement as disclosed in U.S. Patent Application Publication No. 2002/0114249 to Kato et al. (hereinafter “Kato”).

Applicants' undersigned representative explained that Applicants do not agree with such an assertion because each of the independent claims in their current form clearly indicate that the calculation device or calculation step "calculates an offset value in the tracking servo control based on the first regenerative signal and the second regenerative signal." Accordingly, Applicants' undersigned representative explained it is well understood from the plain language of the claims that the offset value is calculated based on both the first regenerative signal and the second regenerative signal. However, the Examiners refused to back down from their broad interpretation, making reference to optical detector 20 in Fig. 6 including portions 20a/20d and 20b/20c as asserted in the Office Action at page 2, section 2.

Nevertheless, the Examiners agreed that if each of the independent claims were amended to describe that the calculation device or calculation step "calculates an offset value in the tracking servo control based on both the first regenerative signal and the second regenerative signal," then the applied rejections of record applying Kato would be withdrawn. The Examiners agreed that Kato does not teach such an arrangement. However, the Examiners noted that no conclusions of patentability could be reached regarding this possible amendment until a further search is conducted.

Accordingly, Applicants have decided to proceed with the amendments to each of the independent claims as agreed upon during the Examiner interview on March 18, 2009. Accordingly, the current rejections of record should thus be withdrawn based on the agreement during the interview between the Examiners and Applicants' undersigned representative.

Applicants respectfully submit that the above-discussed specific features are neither shown nor suggested by the applied art of record. Similar features as discussed above with

regard to independent claim 1 of the instant application are also described in the remaining independent claims 6 and 18-21 of the instant application. Accordingly, similar arguments as set forth above with regard to independent claim 1 also apply to independent claims 18-21 of the instant application.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. § 102(b) should be withdrawn because Kato does not teach or suggest each feature of independent claims 1, 6 and 18-21 of the instant application. As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)."

With regard to the rejections of the dependent claims 2-5, 7 and 11-15, Applicants respectfully submit that these dependent claims are allowable at least because of their dependence from their respective base claims 1 or 6, as discussed above.

In addition, Applicants respectfully submit that dependent claims 8-10 are allowable at least because of their dependence from independent claim 6, and the reasons discussed previously. As to the additionally-applied reference to Kato 093 with regard to the rejection of dependent claims 8-10, Applicants respectfully submit that Kato 093 does not cure the deficiencies discussed above with regard to Kato. In addition, Applicants respectfully submit that dependent claims 16 and 17 are allowable at least because of their dependence from independent claim 1, and the reasons discussed previously. As to the additionally-applied reference to Watabe with regard to the rejection of dependent claims 16 and 17, Applicants

respectfully submit that Watabe does not cure the deficiencies discussed above with regard to

Kato.

**CONCLUSION**

In view of the foregoing discussion, Applicants respectfully request the entry of the amendments to place the application in clear condition for allowance or, in the alternative, in better form for appeal. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution. A favorable action is awaited.

**EXCEPT** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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Dated: March 19, 2009

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